

REMARKS

The present Supplemental Amendment amends claims 1, 3 and 13, and leaves claims 7, 9-12 and 14-17 unchanged. Therefore, the present application has pending claims 1, 3, 7 and 9-17.

Interview Summary

Applicants thank the Examiner for granting the interview conducted on November 12, 2008. In the interview, Applicants' representative presented arguments to overcome the cited references. The Examiner and Applicants' representative did not come to an agreement with regard to the arguments presented. However, the Examiner indicated that it would be helpful to amend the claims to further define "predetermined degree" as recited in the claims, so as to overcome the Zaltman reference. In this Supplemental Amendment, Applicants have amended the claims to more clearly describe the features of the present invention with regard to the "predetermined degree" feature.

Support for Amendments

The support for the amendments to independent claims 1, 3 and 13 may be found, for example, in Fig. 12, step S1206; Fig. 13, step S1301; and page 20, line 18 to page 22, line 9 of the specification.

35 U.S.C. §103 Rejections

I. The Combination of Obrador, Freer, Ho, Atsushi and Zaltman Does Not Teach or Suggest the Features of Claim 1, 13, 14, 16 and 17

Claims 1, 13, 14, 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,585,521 to Obrador, in view of U.S. Patent No.

6,402,520 to Freer, further in view of U.S. Patent No. 5,944,530 to Ho et al. ("Ho"), and even further in view of Japanese Publication No. 09-149894: *English Computer Translation from the Patent Abstracts of Japan* to Atsushi, and even further in view of U.S. Patent No. 6,315,569 to Zaltman. This rejection is traversed for the following reasons. Applicants submit that the features of the present invention, as now more clearly recited in claims 1, 13, 14, 16 and 17, are not taught or suggested by either of Obrador, Freer, Ho, Atsushi or Zaltman, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

The combination of Obrador, Freer, Ho, Atsushi and Zaltman fails to teach or suggest "judging, when an event occurs within the predetermined window, when a facial image of the user is recognized, or when said audio information includes predetermined audio information, whether or not a degree of concentration of said user to said learning program is higher than a predetermined degree by using said measurement information of said blood flow rate and said attention information to determine that the user is in concentration time" as recited in claim 1, and as similarly recited in claim 13.

The Examiner relies upon Zaltman for teaching this feature, citing column 11, lines 41-58. As described in the cited text, Zaltman merely describes where an increase in the processing within a brain region results in a proportional increase in the concentration of oxygen and other blood-born metabolites accessible to that brain region. Thus, measuring the concentration of blood flow to the brain while an

individual performs an isolated cognitive task provides a means of measuring the relative processing contribution of each subregion to the task. This is not the same as the present invention.

For example, there is no teaching or suggestion in Zaltman of where a determination is made as to whether or not a degree of concentration of the user to the learning program is higher than a predetermined degree by using the measurement information of the blood flow rate and the attention information to determine that the user is in concentration time, when an event occurs within the predetermined window, when a facial image of the user is recognized, or when the audio information includes predetermined audio information, as in the present invention. Accordingly, Zaltman is quite different from the present invention.

The combination of Obrador, Freer, Ho, Atsushi and Zaltman fails to teach or suggest “recording, when said degree of concentration of said user to said learning program is higher than said predetermined degree, said degree of concentration of the user and said attention information of the user with said progress of said learning program in said recording means” as recited in claim 1, and as similarly recited in claim 13.

The Examiner relies upon Freer to support the assertion that a step of recording the degree of concentration is disclosed in the prior art. More specifically, on page 4, lines 3-9 of the Office Action, the Examiner merely asserts, without any citations to support the assertion, that “Freer teaches starting a learning program (starting a low-stimuli educational exercise) and displaying learning contents within a predetermined window on said display means.” However, this is not the same as

the present invention, where the degree of concentration of the user and the attention information of the user is recorded with the progress of the learning program in the recording means, when the degree of concentration of the user to the learning program is higher than the predetermined degree.

The combination of Obrador, Freer, Ho, Atsushi and Zaltman fails to teach or suggest “displaying, when said degree of concentration of said user to said learning program is not higher than said predetermined degree, information that the user is not in concentration time” as recited in claim 1, and as similarly recited in claim 13.

In the present invention, information that the user is not in concentration time is displayed when the degree of concentration of the user to said learning program is not higher than a predetermined degree. None of the cited references teaches or suggests this feature.

II. The Combination of Obrador, Ho, Atsushi and Zaltman Does Not Teach or Suggest the Features of Claims 3, 7 and 9-12

Claims 3, 7 and 9-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Obrador in view of Ho, further in view of Atsushi, and even further in view of Zaltman. This rejection is traversed for the following reasons. Applicants submit that the features of the present invention, as now more clearly recited in claims 3, 7 and 9-12, are not taught or suggested by Obrador, Ho, Atsushi or Zaltman, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

The combination of Obrador, Ho, Atsushi and Zaltman fails to teach or suggest “judging whether or not a degree of concentration of said user to said information of contents is higher than a predetermined degree by using said analyzed rate of change in hemoglobin concentration at a corresponding time and said attention information” as recited in claim 3.

As previously discussed, Zaltman merely describes where an increase in the processing within a brain region results in a proportional increase in the concentration of oxygen and other blood-born metabolites accessible to that brain region. Thus, measuring the concentration of blood flow to the brain while an individual performs an isolated cognitive task provides a means of measuring the relative processing contribution of each subregion to the task. This is not the same as the present invention.

For example, there is no teaching or suggestion in Zaltman of where a determination is made as to whether or not a degree of concentration of the user to the information of contents is higher than a predetermined degree by using the analyzed rate of change in hemoglobin concentration at a corresponding time and the attention information, as in the present invention. Accordingly, Zaltman is quite different from the present invention.

The combination of Obrador, Ho, Atsushi and Zaltman fails to teach or suggest “displaying, when said degree of concentration of said user to said information of contents is higher than said predetermined degree, said degree of concentration of the user and said attention information of the user with corresponding time of said information of contents” as recited in claim 3.

The Examiner relies upon Ho to support the assertion that displaying a degree of concentration is disclosed in the prior art, citing column 11, lines 6-8 (see, e.g., page 11, line 21 to page 12, line 4 of the Office Action). However, neither the cited text nor any other portion of Ho teaches or suggests displaying, when the degree of concentration of the user to the information of contents is higher than the predetermined degree, the degree of concentration of the user and the attention information of the user with corresponding time of the information of contents, as in the present invention. As described in column 11, lines 6-8, Ho merely discloses where a report indicating that a student's degree of concentration in the study materials for a period of time is printed. This is not the same as the present invention.

The combination of Obrador, Ho, Atsushi and Zaltman fails to teach or suggest "displaying, when said degree of concentration of said user to said information of contents is not higher than said predetermined degree, information that the user is not in concentration time" as recited in claim 3.

In the present invention, information that the user is not in concentration time is displayed when the degree of concentration of the user to the information of contents is not higher than a predetermined degree. None of the cited reference teaches or suggests this feature.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing Attorney Docket No. 500.42880X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

/DONNA K. MASON/

Donna K. Mason

Registration No. 45,962

DKM/jab
(703) 684-1120